

CLAIMS

1. Repository network node, for communicating with a plurality of network nodes, over a network, wherein selected ones of the network nodes are repository network nodes, the repository network node comprising:
- 5 a network interface coupled to said network; and
a processor coupled to said network interface,
wherein said network interface receives an item query from another network node, via said network,
- 10 wherein said processor forwards said item query to selected ones of said repository network nodes, when said item query is directed at intellectual property protected items, and
wherein said processor forwards said item query to selected non repository network nodes of said network nodes, when said item query is not directed at intellectual property protected items.
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2. The repository network node according to claim 1, wherein the type of content of said intellectual property protected items is selected from the list consisting of:
- 20 audio;
video;
software;
computer game;
data; and
25 e-book.
3. The repository network node according to claim 1, wherein the type of the coupling between said network interface and said network is selected from the list consisting of:
- 30

wireless link; and
wired.

4. The repository network node according to claim 1, wherein the type
5 of said network is selected from the list consisting of:
publicly accessed network; and
network application.
5. The repository network node according to claim 1, wherein said
10 repository network node is a device selected from the list consisting
of:
desktop;
laptop;
workstation;
15 mobile unit; and
network user application.
6. The repository network node according to claim 1, wherein said
repository network node periodically changes at least one attribute
20 respective thereof.
7. The repository network node according to claim 6, wherein said at
least one attribute is selected from the list consisting of:
network interface card identification;
25 logical user name;
network service provider; and
network protocol address.
8. The repository network node according to claim 1, wherein said
30 repository network node has at least one identity.

9. The repository network node according to claim 8, wherein said at least one identity is selected from the list consisting of:
- media access control address;
 - 5 network protocol address;
 - user name; and
 - uniform resource locator.
10. The repository network node according to claim 1, wherein at least one network server is coupled to said network, said at least one network server includes a logged-on list,
- wherein said logged-on list includes the network protocol addresses of said selected repository network nodes.
11. The repository network node according to claim 10, wherein the type of said at least one network server is selected from the list consisting of:
- centralized;
 - distributed; and
 - 20 search engine.
12. The repository network node according to claim 1, wherein each of said selected repository network nodes forwards said item query to other ones of said selected repository network nodes, and
- wherein each of said selected non repository network nodes forwards said item query to other ones of said selected non repository network nodes.
13. The repository network node according to claim 1, wherein each of said selected repository network nodes sends an item query

response to said another network node, when said item query is directed at said intellectual property protected items, and

wherein each of said selected non repository network nodes sends said item query response to said another network node, when said item query is not directed at said intellectual property protected items.

14. Repository network node, selected from a plurality of repository network nodes, the repository network nodes communicating with a plurality of network nodes, over a network, the repository network node comprising:

a network interface coupled to said network; and

a processor coupled to said network interface,

wherein said processor receives item queries from said network nodes via said network interface, said item queries being respective of intellectual property protected items,

wherein said processor sends information respective of said item queries to a network control node, for use by said network control node for the operation of said selected repository network nodes, according to said information.

15. The repository network node according to claim 14, wherein said network control node controls the operation of said repository network nodes, by running a control application in each of said repository network nodes.

16. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes to send a network notification command to at least one network server, automatically, at predetermined time intervals.

17. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes, to send a modified copy of a selected one of said intellectual property protected items, to other ones of said selected repository network nodes, when said network control node sends said modified copy to said selected repository network node.
18. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes to download an update of said control application from said network control node.
19. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes, to download an update of an item characteristics list of said intellectual property protected items, and modified copies of said intellectual property protected items from said network control node,
wherein each of said item characteristics includes at least one pointer to at least one of said selected repository network nodes, and
wherein said at least one selected repository network node includes at least one of said intellectual property protected items, and at least one of said modified copies, at any given time.
20. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes, to download an update of a shared-items directory, from said network control node,

wherein said shared-items directory includes said intellectual property protected items and modified copies of said intellectual property protected items, and

wherein said shared-items directory further includes an item characteristics list of said intellectual property protected items and of said modified copies.

21. The repository network node according to claim 15, wherein said control application enables each of said selected repository network nodes, to download at least one screen saver with changing content, from said network control node.

22. The repository network node according to claim 21, wherein said changing content is selected from the list consisting of:
advertisement; and
said IP protected item.

23. The repository network node according to claim 15, wherein said control application initiates a log-on and a log-off script in each of said selected repository network nodes, when said selected repository network node determines to change at least one attribute thereof.

24. The repository network node according to claim 23, wherein said at least one attribute is selected from the list consisting of:
network interface card identification;
logical user name;
network service provider; and
network protocol address.

25. The repository network node according to claim 15, wherein said control application running in said network control node, enables said network control node to direct a selected one of said repository network nodes to upload the remaining portion of a selected one of said intellectual property protected items, to a selected one of said network nodes, when another one of said selected repository network nodes, ceases to upload said remaining portion to said selected network node.
26. The repository network node according to claim 15, wherein said control application running in said network control node, enables said network control node to direct a selected one of said repository network nodes to upload the remaining portion of a modified copy of a selected one of said intellectual property protected items, to a selected one of said network nodes, when another one of said selected repository network nodes, ceases to upload said remaining portion to said selected network node.
27. The repository network node according to claim 15, wherein said control application running in said network control node, enables said network control node to upload the remaining portion of a selected one of said intellectual property protected items, to a selected one of said network nodes, when a selected one of said repository network nodes, ceases to upload said remaining portion to said selected network node.
28. The repository network node according to claim 15, wherein said control application running in said network control node, enables said network control node to upload the remaining portion of a modified copy of a selected one of said intellectual property protected items, to

a selected one of said network nodes, when a selected one of said repository network nodes, ceases to upload said remaining portion to said selected network node.

5 29. The repository network node according to claim 14, wherein each of said selected repository network nodes degenerates the routing capacity thereof, when the resources thereof are restricted.

10 30. The repository network node according to claim 29, wherein the type of said resources is selected from the list consisting of:

bandwidth;
memory; and
processing time.

15 31. Network control node, for controlling the operation of a plurality of repository network nodes, the repository network nodes communicating with a plurality of network nodes, over a network, the network control node comprising:

a network interface coupled to said network; and

20 a processor coupled to said network interface,

wherein said network control node receives information from said repository network nodes, respective of item queries which said repository network nodes receive from said network nodes, said item queries being respective of intellectual property protected items, and

25 wherein said network control node controls the operation of said repository network nodes according to said information.

32. The network control node according to claim 31, wherein said network control node controls the operation of said repository

network nodes, by running_a control application in each of said repository network nodes.

- 5 33. The network control node according to claim 32, wherein said control application enables each of said repository network nodes to send a network notification command to at least one network server, automatically, at predetermined time intervals.
- 10 34. The network control node according to claim 32, wherein said control application enables each of said repository network nodes, to send a modified copy of a selected one of said intellectual property protected items, to other ones of said repository network nodes, when said network control node sends said modified copy to said repository network node.
- 15 35. The network control node according to claim 32, wherein said control application enables each of said repository network nodes to download an update of said control application from said network control node.
- 20 36. The network control node according to claim 32, wherein said control application enables each of said repository network nodes, to download an update of an item characteristics list of said intellectual property protected items, and modified copies of said intellectual property protected items from said network control node,
- 25 wherein each of said item characteristics includes at least one pointer to at least one of said repository network nodes, and
- wherein each of said at least one repository network node includes at least one of said intellectual property protected items, and
- 30 at least one of said modified copies, at any given time.

- 5 37. The network control node according to claim 32, wherein said control application enables each of said repository network nodes, to download an update of a shared-items directory, from said network control node,
- wherein said shared-items directory includes said intellectual property protected items and modified copies of said intellectual property protected items, and
- 10 wherein said shared-items directory further includes an item characteristics list of said intellectual property protected items and of said modified copies.
- 15 38. The network control node according to claim 32, wherein said control application enables each of said repository network nodes, to download at least one screen saver with changing content, from said network control node.
- 20 39. The network control node according to claim 38, wherein said changing content is selected from the list consisting of:
- advertisement; and
- said IP protected item.
- 25 40. The network control node according to claim 32, wherein said control application modifies a shared-items directory included in each of said repository network nodes.
- 30 41. The network control node according to claim 32, wherein said control application initiates a log-on and a log-off script in each of said repository network nodes, when said repository network node determines to change an attribute thereof.

42. The network control node according to claim 32, wherein said control application running in said network control node, enables said network control node to direct a selected one of said repository network nodes to upload the remaining portion of a selected one of said intellectual property protected items, to a selected one of said network nodes, when another one of said selected repository network nodes, ceases to upload said remaining portion to said selected network node.
43. The network control node according to claim 32, wherein said control application running in said network control node, enables said network control node to direct a selected one of said repository network nodes to upload the remaining portion of a modified copy of a selected one of said intellectual property protected items, to a selected one of said network nodes, when another one of said selected repository network nodes, ceases to upload said remaining portion to said selected network node.
44. The network control node according to claim 32, wherein said control application running in said network control node, enables said network control node to upload the remaining portion of a selected one of said intellectual property protected items, to a selected one of said network nodes, when a selected one of said repository network nodes, ceases to upload said remaining portion to said selected network node.
45. The network control node according to claim 32, wherein said control application running in said network control node, enables said network control node to upload the remaining portion of a modified

copy of a selected one of said intellectual property protected items, to a selected one of said network nodes, when a selected one of said repository network nodes, ceases to upload said remaining portion to said selected network node.

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46. The network control node according to claim 31, wherein said information is respective of the total time which each of said repository network nodes was connected to said network, during a given time period.

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47. The network control node according to claim 31, wherein said information is respective of at least one upload request which each of said repository network nodes receives from at least one of said network nodes, and respective of the total volume of said intellectual property protected items and modified copies of said intellectual property protected items, which each of said repository network nodes uploads to said at least one network node, during a given time period.

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48. The network control node according to claim 31, wherein said information is respective of at least one of said intellectual property protected items and at least one modified copy of said at least one of intellectual property protected item, which each of said repository network nodes uploads to at least one of said network nodes, during a given time period.

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49. The network control node according to claim 31, wherein said information is respective of the total central processing unit time, which each of said repository network nodes consumes, during a given time period.

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50. The network control node according to claim 31, wherein said information includes an activity report respective of said item queries.
- 5 51. The network control node according to claim 45, wherein said activity report includes a plurality of entries selected from the list consisting of:
- 10 number of times which at least one network connection between each of said repository network nodes and at least one of said network nodes, is disconnected in a given time period;
- bandwidth of at least one other network connection between each of said repository network nodes and said network control node;
- 15 network protocol address of each said network nodes, which sends an item request to each of said repository network nodes, in a given time period;
- most popular ones of said intellectual property protected items which each of said at least one network node requests from each of said repository network nodes, in a given time period; and
- 20 most popular ones of at least one modified copy of at least one of said intellectual property protected items, which each of said repository network nodes uploads to each of said at least one network node, in a given time period.
- 25 52. The network control node according to claim 31, wherein said network control node signs each of said intellectual property protected items with a digital signature, before uploading said intellectual property protected item to each of said repository network nodes, whereby said network control node identifies a selected one of said intellectual property protected items, which resides in a
- 30 selected one of said network nodes.

53. The network control node according to claim 31, wherein said network control node signs modified copies of each of said intellectual property protected items with a digital signature, before
5 uploading said intellectual property protected item to each of said repository network nodes, whereby said network control node identifies a selected one of said modified copies, which resides in a selected one of said network nodes.
- 10 54. Network control node, for balancing the load among a plurality of repository network nodes, the repository network nodes communicating with a plurality of network nodes, over a network, the network control node comprising:
- 15 a network interface coupled to said network; and
a processor coupled to said network interface,
wherein said network control node receives an activity report from each of said repository network nodes, said activity report being respective of item queries which said repository network nodes receive from each of said network nodes, said item queries being
20 respective of intellectual property protected items, and
wherein said network control node balances the load among said repository network nodes, by comparing said activity report with other activity reports received from other ones of said repository network nodes.
- 25 55. The network control node according to claim 54, wherein said activity report includes a plurality of entries selected from the list consisting of:

number of times which at least one network connection between each of said repository network nodes and at least one of said network nodes, is disconnected in a given time period;

bandwidth of at least one other network connection between each of said repository network nodes and said network control node;

network protocol address of each said network nodes, which sends an item request to each of said repository network nodes, in a given time period;

most popular ones of said intellectual property protected items which each of said at least one network node requests from each of said repository network nodes, in a given time period; and

most popular ones of at least one modified copy of at least one of said intellectual property protected items, which each of said repository network nodes uploads to each of said at least one network node, in a given time period.

56. The network control node according to claim 54, wherein said network control node determines whether to offer a reward to a selected repository network node, according to the outcome of said comparison.

57. The network control node according to claim 54, wherein said reward is selected from the list consisting of:

IP protected item;

license to use said IP protected item;

screen saver including a changing content;

movie ticket; and

financial incentive.

58. The network control node according to claim 57, wherein said changing content is selected from the list consisting of:

advertisement; and
said IP protected item.

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59. Modified item, comprising:

at least one modified item characteristic; and
modified item content,

wherein said modified item is produced according to at least one
item characteristic of an item, item content of said item and at least
one supplementary material.

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60. The modified item according to claim 59, wherein said at least one
supplementary material is a notice that said modified item is a
modified copy of an intellectual property protected item.

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61. The modified item according to claim 60, wherein said at least one
supplementary material is in a form selected from the list consisting
of:

text;
graphics;
animation; and
voice.

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62. The modified item according to claim 60, wherein the beginning
portion of said modified item before said at least one supplementary
material is usable, whereby a network node continues to download
said modified item, after examining said beginning portion.

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63. The modified item according to claim 59, wherein said at least one supplementary material is a purchase offer for a network node which downloads said modified item, to purchase a usable copy of said modified item.

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64. The modified item according to claim 59, wherein said at least one supplementary material includes at least one link to at least one network site, and

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wherein said at least one network site includes a purchase offer for a network node which downloads said modified item, to purchase a usable copy of said modified item.

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65. The modified item according to claim 59, wherein said at least one supplementary material includes at least one link to at least one network site, and

wherein said at least one network site includes a membership offer for a network node which downloads said modified item, to operate similar to a repository network node,

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wherein said repository network node uploads a modified copy of an intellectual property protected item to another one of said network node, when said repository network node receives an upload request from said another network node, to upload said intellectual property protected item.

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66. Method for uploading an item to a network node, over a network, the method comprising the steps of:

determining the type of said item; and

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forwarding an item query to a plurality of selected repository network nodes which belong to a selected group of repository network nodes, when said item is intellectual property (IP) protected,

and forwarding said item query to a plurality of other repository network nodes which do not belong to said selected group, when said item is not IP protected.

- 5 67. The method according to claim 66, further comprising a preliminary step of receiving said item query by each of said selected repository network nodes, from said network node.
- 10 68. The method according to claim 67, further comprising a preliminary step of receiving a logged-on list by said network node, from a network server, over said network.
- 15 69. The method according to claim 68, further comprising a preliminary step of sending a logged-on query by said network node, to said network server.
- 20 70. The method according to claim 66, further comprising a step of sending an item query response to said network node, by each of said selected repository network nodes, which belongs to said selected group.
- 25 71. The method according to claim 70, further comprising a step of receiving an upload request from said network node, by a selected repository network node which belongs to said selected group, to upload said item.
- 30 72. The method according to claim 71, further comprising a step of uploading a modified copy of said item to said network node, by said selected repository network node.

73. The method according to claim 66, further comprising a step of sending an item query response to said network node, by each of said other repository network nodes which does not belong to said selected group.

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74. The method according to claim 73, further comprising a step of receiving an upload request from said network node, by a selected one of said other repository network nodes, to upload said item.

10 75. The method according to claim 74, further comprising a step of uploading said item to said network node, by said selected other repository network node.

15 76. The method according to claim 66, wherein said step of determining further comprises a procedure of comparing at least one characteristic of said item, with at least one entry in an item characteristics list,

20 wherein said item characteristics list is located in a shared-items directory, said shared-items directory further includes said item, said shared-items directory is located in each of said selected repository network nodes,

wherein said item is IP protected when said at least one characteristic matches said at least one entry, and

25 wherein said item is not IP protected when said at least one characteristic does not match said at least one entry.

77. The method according to claim 66, further comprising a step of controlling the operation of each of said selected repository network nodes, by a control application.

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78. The method according to claim 77, further comprising a step of updating said shared-items directory, by said control application.

5 79. The method according to claim 77, further comprising a step of modifying said shared-items directory, by said control application.

80. The method according to claim 77, further comprising a step of downloading an update of said control application from a network control node.

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81. The method according to claim 66, further comprising a step of producing at least one translated name for said item,

15 wherein said at least one translated name is produced by a translator coupled to said network, according to at least one item characteristic of said item, for identifying said at least one translated name by each of said selected repository network nodes associated with another translator similar to said translator.

20 82. The method according to claim 66, further comprising a step of periodically changing at least one attribute respective of each of said selected repository network nodes.

83. The system according to claim 82, wherein said at least one attribute is selected from the list consisting of:

25 network interface card identification;
logical user name;
network service provider; and
network protocol address.

84. The method according to claim 66, further comprising a step of initiating a log-off and a log-on script in each of said selected repository network nodes, by a control application.

5 85. The method according to claim 72, wherein said step of uploading is performed at a high quality of service, during the uploading of the beginning portion of a modified copy of said item, and at a low quality of service during the uploading of the remainder of said modified copy.

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86. The method according to claim 72, wherein the quality of service is alternated between a high value and a low value, while performing said step of uploading.

15 87. The method according to claim 66, further comprising a step of automatically sending a network notification command to at least one network server, over said network, by each of said selected repository network nodes, at predetermined time intervals.

20 88. The method according to claim 67, further comprising a step of sending information to a network control node, respective of said step of receiving.

25 89. The method according to claim 72, further comprising a step of sending information to a network control node, respective of said step of uploading.

30 90. The method according to claim 72, further comprising a step of sending information to a network control node, respective of said modified copy.

91. The method according to claim 77, wherein said control application enables each of said selected repository network nodes, to send periodically an activity report to a network control node.

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92. The method according to claim 91, wherein said activity report includes a plurality of entries selected from the list consisting of:

number of times which at least one network connection between each of said selected repository network nodes and said network node, is disconnected in a given time period;

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bandwidth of at least one other network connection between each of said selected repository network nodes and said network control node;

network protocol address of said network node, which sends said item query to each of said selected repository network nodes, in a given time period;

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most popular ones of a plurality of items which said network node queries from each of said selected repository network nodes, in a given time period; and

most popular ones of at least one modified copy of said items which each of said selected repository network nodes uploads to said network node, in a given time period.

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93. The method according to claim 91, further comprising a step of monitoring the activity of a repository network node, by said network control node, by comparing said activity report of said repository network node, with said activity report of another repository network node,

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wherein said repository network node and said another repository network node belong to said selected group.

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94. The method according to claim 93, further comprising a step of adjusting the load on a selected repository network node, by said network control node, according to the outcome of said comparison step,

wherein said selected repository network node belongs to said selected group.

95. The method according to claim 91, further comprising a step of rating the activity of a selected repository network node, by said network control node, by comparing said activity report of said selected repository network node, with said activity report of another selected repository network node,

wherein said repository network node and said another repository network node belong to said selected group.

96. The method according to claim 95, further comprising a step of determining by said network control node, whether to offer a reward to said selected repository network node, according to the outcome of said comparison step.

97. The method according to claim 66, further comprising a step of degenerating the routing capacity by a selected repository network node, when the resources thereof are restricted.

wherein said selected repository network node belongs to said selected group.

98. The method according to claim 97, wherein the type of said resources is selected from the list consisting of:

bandwidth;

memory; and
processing time.

5 99. The method according to claim 66, further comprising a preliminary step of signing said item with a digital signature, by a network control node, whereby said network control node identifies a modified copy of said item,

wherein said modified copy resides in a selected one of said network nodes.

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100. The method according to claim 72, wherein said step of uploading further comprises a procedure of directing a different one of said selected repository network nodes to upload the remaining portion of said modified copy to said network node, when said selected repository network node ceases to upload said modified copy to said network node, during said step of uploading,

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wherein said step of directing is performed by a network control node.

20 101. The method according to claim 72, wherein said step of uploading further comprises a procedure of continuing the uploading of the remaining portion of said modified copy to said network node, by a network control node, when said selected repository network node ceases to upload said modified copy to said network node, during
25 said step of uploading.

102. Method for purchasing an Intellectual Property (IP) protected item over a network, the method comprising the step of:

encrypting said IP protected item according to an encryption key, said encryption key determined according to user sensitive information.

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103. The method according to claim 102, further comprising a preliminary step of determining said encryption key according to said user sensitive information.

10 104. The method according to claim 103, further comprising a preliminary step of authenticating said user sensitive information, and performing a financial transaction according to said user sensitive information.

15 105. The method according to claim 102, further comprising a step of decrypting a downloaded encrypted IP protected item, according to said user sensitive information.

20 106. The method according to claim 102, further comprising a preliminary step of receiving a purchase request and said user sensitive information from a network node.

107. The method according to claim 102, further comprising a step of uploading said encrypted IP protected item to a network node, after said step of encrypting.

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108. The method according to claim 102, further comprising a step of using said encrypted IP protected item by a network node,

wherein said network node runs a playback application by providing said user sensitive information to a decryption algorithm.

109. The method according to claim 102, wherein the type of said user sensitive information is selected from the list consisting of:

credit card number;
social security number;
word;
number;
combination of letters and digits.

110. The method according to claim 106, further comprising a step of sending information to a network control node, respective of said step of receiving.

111. The method according to claim 107, further comprising a step of sending information to a network control node, respective of said step of uploading.

112. The method according to claim 102, further comprising a step of sending an activity report by a repository network node, to a network control node.

113. The method according to claim 112, wherein said activity report includes a plurality of entries selected from the list consisting of:

number of times which at least one network connection between said repository network node and a network node, is disconnected in a given time period;

bandwidth of at least one other network connection between said repository network node and said network control node;

network protocol address of said network node, which sends a purchase request to said repository network node, in a given time period, to purchase said IP protected item;

most popular IP protected items which said network node requests from said repository network node, in a given time period; and

most popular ones of said IP protected items which said repository network node uploads to said network node, in a given time period.

114. The method according to claim 112, further comprising a step of monitoring the activity of a selected one of a plurality of repository network nodes, by said network control node, by comparing said activity report of said selected repository network node, with said activity report of another selected one of said repository network nodes.

115. The method according to claim 114, further comprising a step of adjusting the load on said selected repository network node, by said network control node, according to the outcome of said comparison step.

116. The method according to claim 112, further comprising a step of rating the activity of a selected one of a plurality of repository network nodes, by said network control node, by comparing said activity report of said selected repository network node, with said activity report of another selected one of said repository network nodes.

117. The method according to claim 116, further comprising a step of determining by said network control node, whether to offer a reward

to said selected repository network node, according to the outcome of said comparison step.

118. The method according to claim 102, further comprising a step of
5 degenerating the routing capacity by a repository network node,
when the resources thereof are restricted.

119. The method according to claim 118, wherein the type of said
resources is selected from the list consisting of:

10 bandwidth;
memory; and
processing time.

120. The method according to claim 102, further comprising a preliminary
15 step of signing said item with a digital signature, by a network control
node, whereby said network control node identifies said IP protected
item,
 wherein said IP protected item resides in a selected network
node.

121. The method according to claim 107, wherein said step of uploading
further comprises a procedure of directing a repository network node
to upload the remaining portion of said IP protected item to said
network node, when a different repository network node ceases to
25 upload said IP protected item to said network node, during said step
of uploading,

 wherein said step of directing is performed by a network control
node.

122. The method according to claim 107, wherein said step of uploading further comprises a procedure of continuing the uploading of the remaining portion of said IP protected item to said network node, by a network control node, when said a repository network node ceases to upload said IP protected item to said network node, during said step of uploading.

123. The method according to claim 102, wherein said step of purchasing is performed on a pay-per-view basis.

124. Method for uploading a modified copy of an infringing item, to a network node, over a network, the method comprising the step of:
uploading said modified copy from a repository network node, when said repository network node is not occupied, and sending an upload request by said repository network node to a network control node, when said repository network node is occupied.

125. The method according to claim 124, further comprising a preliminary step of receiving said upload request by said repository network node, from said network node, to upload said infringing item.

126. The method according to claim 124, further comprising a step of locating an unoccupied repository network node, after said step of sending, wherein said network control node performs said step of locating.

127. The method according to claim 126, further comprising a step of forwarding said upload request to said unoccupied repository network node.

128. The method according to claim 127, further comprising a step of uploading said modified copy to said network node, by said unoccupied repository network node.

5 129. The method according to claim 128, wherein said network node proliferates said modified copy in said network, when said network node is not attended by the person who operates said network node.

10 130. The method according to claim 124, further comprising a preliminary step of retrieving said modified copy from a shared-items directory located in said repository network node.

15 131. The method according to claim 130, further comprising a step of updating said shared-items directory, by a control application.

132. The method according to claim 128, further comprising a preliminary step of retrieving said modified copy from a shared-items directory located in said unoccupied repository network node.

20 133. The method according to claim 132, further comprising a step of updating said shared-items directory, by a control application.

25 134. The method according to claim 126, further comprising a step of controlling the operation of said repository network node, and said unoccupied repository network node, by a control application.

135. The method according to claim 134, further comprising a step of downloading an update of said control application from a network control node.

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136. The method according to claim 126, further comprising a step of producing at least one translated name for said modified copy,

wherein a translator coupled to said network produces said at least one translated name for said modified copy, according to at least one item characteristic of said modified copy, for identifying said at least one translated name by said repository network node and by said unoccupied repository network node, and

wherein each of said repository network node and said unoccupied repository network node is associated with another translator similar to said translator.

137. The method according to claim 126, further comprising a step of periodically changing at least one attribute respective of said repository network node and said unoccupied repository network node.

138. The system according to claim 137, wherein said at least one attribute is selected from the list consisting of:

network interface card identification;

logical user name;

network service provider; and

network protocol address.

139. The method according to claim 126, further comprising a step of initiating a log-off and a log-on script in said repository network node and in said unoccupied repository network node, by a control application.

140. The method according to claim 124, wherein said step of uploading is performed at a high quality of service, during the uploading of the beginning portion of said modified copy, and at a low quality of service during the uploading of the remainder of said modified copy.

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141. The method according to claim 128, wherein said step of uploading by said unoccupied repository network node, is performed at a high quality of service, during the uploading of the beginning portion of said modified copy, and at a low quality of service during the uploading of the remainder of said modified copy.

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142. The method according to claim 124, wherein the quality of service is alternated between a high value and a low value, while performing said step of uploading.

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143. The method according to claim 128, wherein the quality of service is alternated between a high value and a low value, while performing said step of uploading by said unoccupied repository network node.

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144. The method according to claim 124, further comprising a step of automatically sending a network notification command to a network control node over said network, by said repository network node, at predetermined time intervals.

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145. The method according to claim 125, further comprising a step of sending information to said network control node, respective of said step of receiving.

146. The method according to claim 124, further comprising a step of sending information to said network control node, respective of said step of uploading.

5 147. The method according to claim 128, further comprising a step of sending information to said network control node, respective of said step of uploading by said unoccupied repository network node.

10 148. The method according to claim 124, further comprising a step of sending information to said network control node, respective of said modified copy.

15 149. The method according to claim 124, further comprising a step of sending an activity report by said repository network node, to said network control node.

150. The method according to claim 149, wherein said activity report includes a plurality of entries selected from the list consisting of:

20 number of times which at least one network connection between said repository network node and said network node, is disconnected in a given time period;

 number of times which at least one network connection between said unoccupied repository network node, and said network node, is disconnected in a given time period;

25 bandwidth of at least one other network connection between said repository network node and said network control node;

 bandwidth of at least one other network connection between said unoccupied repository network node and said network control node;

network protocol address of said network node, which sends an upload request to said repository network node, in a given time period, to upload said modified copy;

most popular ones of said infringing item which said network node requests from said repository network node, in a given time period;

most popular ones of said modified copy which said repository network node uploads to said network node, in a given time period; and

most popular ones of said modified copy which said unoccupied repository network node uploads to said network node, in a given time period.

151. The method according to claim 149, further comprising a step of monitoring the activity of a selected repository network node, by said network control node, by comparing said activity report of said selected repository network node, with said activity report of another selected repository network node.

152. The method according to claim 151, further comprising a step of adjusting the load on said selected repository network node, by said network control node, according to the outcome of said comparison step.

153. The method according to claim 149, further comprising a step of rating the activity of a selected repository network node, by said network control node, by comparing said activity report of said selected repository network node, with said activity report of another selected repository network node.

154. The method according to claim 153, further comprising a step of determining by said network control node, whether to offer a reward to said selected repository network node, according to the outcome of said comparison step.

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155. The method according to claim 124, further comprising a step of degenerating the routing capacity by said repository network node, when the resources thereof are restricted.

10 156. The method according to claim 155, wherein the type of said resources is selected from the list consisting of:

bandwidth;
memory; and
processing time.

15

157. The method according to claim 126, further comprising a step of degenerating the routing capacity by said unoccupied repository network node, when the resources thereof are restricted.

20 158. The method according to claim 157, wherein the type of said resources is selected from the list consisting of:

bandwidth;
memory; and
processing time.

25

159. The method according to claim 124, further comprising a preliminary step of signing said modified copy with a digital signature, by said network control node, whereby said network control node identifies said modified copy,

wherein said modified copy resides in a selected one of said network nodes.

5 160. The method according to claim 124, wherein said step of uploading further comprises a procedure of directing a different repository network node to upload the remaining portion of said modified copy to said network node, when said repository network node ceases to upload said modified copy to said network node, during said step of uploading,
10 wherein said step of directing is performed by said network control node.

15 161. The method according to claim 124, wherein said step of uploading further comprises a procedure of continuing the uploading of the remaining portion of said modified copy to said network node, by said network control node, when said repository network node ceases to upload said modified copy to said network node, during said step of uploading.

20 162. The method according to claim 128, wherein said step of uploading by said unoccupied repository network node further comprises a procedure of directing a different unoccupied repository network node to upload the remaining portion of said modified copy to said network node, when said unoccupied repository network node ceases to
25 upload said modified copy to said network node, during said step of uploading,
wherein said step of directing is performed by said network control node.

163. The method according to claim 128, wherein said step of uploading
by said unoccupied repository network node further comprises a
procedure of continuing the uploading of the remaining portion of said
modified copy to said network node, by said network control node,
5 when said unoccupied repository network node ceases to upload
said modified copy to said network node, during said step of
uploading.

164. Method for rewarding a repository network node coupled to a
10 network, for uploading an item to a network node coupled to the
network, the method comprising the steps of:

analyzing uploading parameters received from said repository
network node,

15 determining a reward according to the analysis of said uploading
parameters; and

uploading said reward to said repository network node.

165. The method according to claim 164, wherein said reward is selected
from the list consisting of:

20 IP protected item;
license to use said IP protected item;
screen saver including a changing content;
movie ticket; and
financial incentive.

25 166. The method according to claim 165, wherein said changing content is
selected from the list consisting of:

advertisement; and
said IP protected item.

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